```
============================================================
Sequence Listing was accepted.
If you need help call the Patent Electronic Business Center at (866)
217-9197 (toll free).
Reviewer: Durreshwar Anjum
Timestamp: Mon May 21 13:30:56 EDT 2007
============================================================
```

Application No: 10589389   Version No: 1.0

Input Set:

Output Set:

Started: 2007-05-18 12:21:30.393

Finished: 2007-05-18 12:21:31.603

Elapsed: 0 hr(s) 0 min(s) 1 sec(s) 210 ms

Total Warnings: 25

Total Errors: 0

No. of SeqIDs Defined: 30

Actual SeqID Count: 30

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
W 213	Artificial or Unknown found in <213> in SEQ ID (15)
W 213	Artificial or Unknown found in <213> in SEQ ID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20)
W 213	Artificial or Unknown found in <213> in SEQ ID (21)
W 213	Artificial or Unknown found in <213> in SEQ ID (22)
W 213	Artificial or Unknown found in <213> in SEQ ID (23)
W 213	Artificial or Unknown found in <213> in SEQ ID (24)
W 213	Artificial or Unknown found in <213> in SEQ ID (25)

```
         Input Set:


         Output Set:



           Started:    2007-05-18 12:21:30.393
          Finished:    2007-05-18 12:21:31.603
           Elapsed:    0 hr(s) 0 min(s) 1 sec(s) 210 ms
    Total Warnings:    25
      Total Errors:    0
No. of SeqIDs Defined:  30
 Actual SeqID Count:    30
```

Error code   Error Description

       This error has occured more than 20 times, will not be displayed

<110>   Nakaita, Yasukazu
        Tsuchiya, Youichi

<120>   A method for detecting and determining lactic acid bacterium

<130>   294857US0PCT

<140>   10589389
<141>   2007-05-18

<150>   10/589389
<151>   2006-08-15

<150>   PCT/JP05/02331
<151>   2005-02-16

<150>   JP 2004-040381
<151>   2004-02-17

<160>   30

<170>   PatentIn version 3.3

<210>   1
<211>   1565
<212>   DNA
<213>   Lactobacillus hexosus

<220>
<221>   source
<222>   (1)..(1565)
<223>   strain="SBC8050"

<400>   1
ttggagagtt tgatcctggc tcaggacgaa cgctggcggc gtgcctaata catgcaagtc   60

gaacgcacag atattaacag aagctgcttg cagtggaagy taattgatgt gagtggcgga   120

cgggtgagta acacgtgggt aacctaccca aaagtggggg ataacatttg gaaacagatg   180

ctaataccgc ataatttaag tgaccacatg gtcacttaat gaaagatggy ttcggctatc   240

acttttggat ggacccgcgg cgtattagct agttggtggg ataacggcct accaaggcga   300

tgatacgtag ccgacctgag agggtaatcg gccacattgg gactgagaca cggcccaaac   360

tcctacggga ggcagcagta gggaatcttc cacaatggac gaaagtctga tggagcaacg   420

ccgcgtgagt gaagaaggtt ttcggatcgt aaaactctgt tgttggagaa gaacagggac   480

tagagtaact gttagtccta tgacggtatc caaccagaaa gccacggcta actacgtgcc   540

agcagccgcg gtaatacgta ggtggcaagc gttgtccgga tttattgggc gtaaagcgag   600

```
cgcaggcggt tttttaagtc tgatgtgaaa gccttcggct taaccgaaga agtgcattag      660

aaactgggaa acttgagtgc agaagaggag agtggaactc catgtgtagc ggtgaaatgc      720

gtagatatat ggaagaacac cagtggcgaa ggcggctctc tggtctgtaa ctgacgctga      780

ggctcgaaag tatggggagc aacaggatt agataccctg gtagtccata ccgtaaacga      840

tgaatgctaa gtgttggagg gtttccgccc ttcagtgctg cagctaacgc attaagcatt      900

ccgcctgggg agtacgaccg caaggttgaa actcaaagga attgacgggg gcccgcacaa      960

gcggtggagc atgtggttta attcgaagct acgcgaagaa ccttaccagg tcttgacatc     1020

ctttgaccac tgtagagata cagctttccc ttcggggaca aagtgacagg tggtgcatgg     1080

ttgtcgtcag ctcgtgtcgt gagatgttgg gttaagtccc gcaacgagcg caacccttat     1140

gactagttgc cagcattaag ttgggcactc tagtgagact gccggtgaca aaccggagga     1200

aggtggggat gacgtcaaat cagcatgccc cttatgacct gggctacaca cgtgctacaa     1260

tggttggtac aacgagttgc gaacccgcga gggtaagcta atctcttaaa gccaatctca     1320

gttcggattg taggctgcaa ctcgcctaca tgaagtcgga atcgctagta atcgcggatc     1380

agcacgccgc ggtgaatacg ttcccgggcc ttgtacacac cgcccgtcac accatgagag     1440

tttgtaacac ccgaagccgg tggggtaacc tctatgagga gctaaccgtc taaggtggga     1500

cagatgattg gggtgaagtc gtaacaaggt agccgtagga gaacctgcgg ctggatcacc     1560

tcctt                                                                 1565


<210>    2
<211>    517
<212>    DNA
<213>    Lactobacillus hexosus


<220>
<221>    source
<222>    (1)..(517)
<223>    strain="SBC8050"

<400>    2
cagttctgtg tttacatggt gttggtgctt cagtcgttaa cgctttgtct agccaattaa       60

acgttgaggt ccttaaagaa ggaaaacgct actatatgga tttcaagcgc ggtaaagtta      120

atactgagct taaggttagc ggtacaattc cagaacatga acacggcaca attgttcatt      180

tttggcctga tcatgatatt tttagggaaa caaccgttta tgatattaaa atttttaacaa      240

cgcgaattcg tgagttggcc tttttgaata agggtttacg aattagcatt gaagatttac      300
```

```
gtcctgagaa accgaccaaa gaagttttcc actatgaagg tggcattaag agttacgttg      360

agtatttaga caacggtaag cacgatcttt ttccagagcc aatttacgtg gaaggtgacg      420

aaaagggaat taaggttgaa gttgctttac aatacactga cgattaccac actaacttga      480

tgaccttcgc caataatatt catacctatg aagtgga                              517


<210>   3
<211>   1526
<212>   DNA
<213>   Lactobacillus pseudocollinoides


<220>
<221>   source
<222>   (1)..(1526)
<223>   strain="SBC8057"

<400>   3
tgatcctggc tcaggatgaa cgctggcggc gtgcctaata catgcaagtc gaacgcatcc       60

cgttaaatga agtgcttgca cggattttaa catcggatga gtggcgaact ggtgagtaac      120

acgtgggtaa cctgcccaga agcaggggat aacacttgga aacaggtgct aataccgtat      180

aacaacaaaa accgcatggt ttttgtttga aggtggtttt cggctatcac ttctggaagg      240

acccgcggcg tattagctag ttggtggagt aacggttcac caaggcaatg atacgtagcc      300

gacctgagag ggtaatcggc cacattggga ctgagacacg gcccaaactc ctacgggagg      360

cagcagtagg gaatcttcca caatggacga aagtctgatg gagcaacgcc gcgtgagtga      420

agaaggtttt cggatcgtaa aactctgttg ttgaagaaga cacgtttgagagtaactgt      480

tcagacgttg acggtattca accagaaagc cacggctaac tacgtgccag cagccgcggt      540

aatacgtagg tggcaagcgt tatccggatt tattgggcgt aaagcgagcg caggcggtta      600

cttaagtctg atgtgaaagc cttcggctta accggagaag tgcatcggaa actgggtaac      660

ttgagtgcag aagaggacag tggaactcca tgtgtagcgg tgaaatgcgt agatatatgg      720

aagaacacca gtggcgaagg cggctgtctg gtctgtaact gacgctgagg ctcgaaagca      780

tgggtagcga acaggattag ataccctggt agtccatgcc gtaaacgatg aatgctaggt      840

gttggagggt ttccgccctt cagtgccgca gctaacgcat taagcattcc gcctggggag      900

tacgaccgca aggttgaaac tcaaaggaat tgacgggggc cgcacaagc ggtggagcat       960

gtggtttaat tcgaagctac gcgaagaacc ttaccaggtc ttgacatact gtgctaacct     1020

aagagattag gcgttccctt cggggacgca gatacaggtg gtgcatggct gtcgtcagct     1080
```

cgtgtcgtga gatgttgggt taagtcccgc aacgagcgca acccttattg tcagttgcca   1140

gcatttagtt gggcactctg gcgagactgc cggtgacaaa ccggaggaag gtggggatga   1200

cgtcaagtca tcatgcccct tatgacctgg gctacacacg tgctacaatg gatggtacaa   1260

cgagttgcga actcgcgaga gcaagctaat ctcttaaagc cattctcagt tcggactgta   1320

ggctgcaact cgcctacacg aagtcggaat cgctagtaat cgcggatcag catgccgcgg   1380

tgaatacgtt cccgggcctt gtacacaccg cccgtcacac catgagagtt tgcaacaccc   1440

aaagtcggtt cggtaacctt cgggagccag ccgcctaagg tggggcagat gattagggtg   1500

aagtcgtaac aaggtagccg taggag   1526

<210> 4
<211> 484
<212> DNA
<213> Lactobacillus pseudocollinoides

<220>
<221> source
<222> (1)..(484)
<223> strain="SBC8057"

<400> 4
ctggtggtct gcatggtgtg gggcatccgt gtgaacgcgc tgtctccgaa ctggacgtta   60

aggtcgttcg ggacggcaag cggtactaca tggactttgc gtacggccac gttaagaccc   120

caatgaaggt cattgacgaa gggttaccag aaaacattcg cgggaccacg gtgcacttct   180

tgccggaccc agatattttc cgggaaacca ctacgtacga cattaagatc ctgaccaccc   240

ggatccgcga gctggctttc ttaaacaagg gtctgcgcat tactatccgt gatgagcggc   300

ctgacgagcc aactgaacaa tcctttatgt acgaaggcgg gatccgtcat tacgttgaat   360

atttaaataa aaacaaggat gtcattttcc ctgaaccaat ctatgttgaa ggtgaagaaa   420

agggcatcac ggttgaagtt gcgttgcagt ataccgacga ctaccactca aacctgttga   480

cgtt   484

<210> 5
<211> 330
<212> DNA
<213> Pediococcus damnosus

<220>
<221> source
<222> (1)..(330)

<223> strain="SBC8023"

<220>
<221> misc_feature
<222> (19)..(19)
<223> n strands for any base

<400> 5
ttattgtgcc tgtcaaatnc aagttcttga aggtttggaa gcagttagaa aacgtcccgg   60

aatgtatatt ggggcaacaa gtgcccaagg actccatcat ttagtttggg aaattattga   120

taacggaatt gatgaagctt tagccgggtt tgcggataaa atcgatgtga cggttgaaaa   180

agataatagc attacggttt ttgataatgg ccgaggaatt ccagttggaa tccaggctaa   240

gactggtaaa ccagccctag agacagtttt cacaattttg catgccggtg gtaagtttgg   300

cggcggcggt tataaagttt caggtgggta   330

<210> 6
<211> 21
<212> DNA
<213> Artificial

<220>
<223> a primer for L. hexosus

<400> 6
gcggtaaagt taatactgag c   21

<210> 7
<211> 20
<212> DNA
<213> Artificial

<220>
<223> a primer for L. hexosus or L. pseudocollinoides

<400> 7
atkccctttt cktcaccttc   20

<210> 8
<211> 18
<212> DNA
<213> Artificial

<220>
<223> a primer for L. pseudocollinoides

<400> 8
gttcgggacg gcaagcgg   18

<210> 9
<211> 17
<212> DNA
<213> Artificial

<220>
<223> a primer for P. damnosus

<400> 9
aagttcttga aggtttg   17

<210> 10
<211> 16
<212> DNA
<213> Artificial

<220>
<223> a primer for P. damnosus

<400> 10
tcggccatta tcaaaa   16

<210> 11
<211> 21
<212> DNA
<213> Artificial

<220>
<223> a primer

<400> 11
tggttaaata ccgtcaaccc t   21

<210> 12
<211> 20
<212> DNA
<213> Artificial

<220>
<223> a primer

<400> 12
ggataccgtc actgcatgag   20

<210> 13
<211> 18
<212> DNA
<213> Artificial

<220>
<223> a primer

<400> 13

```
ttgaataccg tcaacgtc                                                    18


<210>  14
<211>  20
<212>  DNA
<213>  Artificial

<220>
<223>  a primer

<400>  14
ccatgtggtc acttaaattc                                                  20


<210>  15
<211>  19
<212>  DNA
<213>  Artificial

<220>
<223>  a probe


<220>
<221>  modified_base
<222>  (1)..(1)
<223>  LC Red640 labelled

<220>
<221>  modified_base
<222>  (19)..(19)
<223>  phosphorylated

<400>  15
cgccactcgc ttcattgtt                                                   19


<210>  16
<211>  20
<212>  DNA
<213>  Artificial

<220>
<223>  a probe


<220>
<221>  modified_base
<222>  (1)..(1)
<223>  LC Red640 labelled

<220>
<221>  modified_base
<222>  (20)..(20)
<223>  phosphorylated
```

<400> 16

cgccacccac atcaattaac   20

<210> 17
<211> 20
<212> DNA
<213> Artificial

<220>
<223> a probe

<220>
<221> modified_base
<222> (1)..(1)
<223> LC Red705 labelled

<220>
<221> modified_base
<222> (20)..(20)
<223> phosphorylated

<400> 17

cgccactcac tttatagttg   20

<210> 18
<211> 18
<212> DNA
<213> Artificial

<220>
<223> a probe

<220>
<221> modified_base
<222> (1)..(1)
<223> LC Red705 labelled

<220>
<221> modified_base
<222> (18)..(18)
<223> phosphorylated

<400> 18

cgccactcat ccgatgtt   18

<210> 19
<211> 22
<212> DNA
<213> Artificial

<220>
<223> a probe

<220>
<221> modified_base
<222> (22)..(22)
<223> FITC labeled

<400> 19
ggttacccac gtgttactca cc   22

<210> 20
<211> 23
<212> DNA
<213> Artificial

<220>
<223> a probe

<220>
<221> modified_base
<222> (23)..(23)
<223> FITC labelled

<400> 20
gtggaaggtg aagaaaaggg aat   23

<210> 21
<211> 24
<212> DNA
<213> Artificial

<220>
<223> a probe

<220>
<221> modified_base
<222> (1)..(1)
<223> LC Red705 labelled

<220>
<221> modified_base
<222> (24)..(24)
<223> phosphorylated

<400> 21
ggttgaagtt gctttacagt acac   24

<210> 22
<211> 21
<212> DNA
<213> Artificial

<220>
<223> a probe

<220>
<221> modified_base
<222> (21)..(21)
<223> FITC labelled

<400> 22
cttgtggtag accctcttca a   21

<210> 23
<211> 18
<212> DNA
<213> Artificial

<220>
<223> a probe

<220>
<221> modified_base
<222> (1)..(1)
<223> LC Red640 labelled

<220>
<221> modified_base
<222> (18)..(18)
<223> phosphorylated

<400> 23
gtgcattggc gtcttcac   18

<210> 24
<211> 19
<212> DNA
<213> Artificial

<220>
<223> a primer

<400> 24
cgagcttccg ttgaatgac   19

<210> 25
<211> 21
<212> DNA
<213> Artificial

<220>
<223> a primer

<400> 25

ggtcattcgt ggcgggaaaa a   21

<210> 26
<211> 21
<212> DNA
<213> Artificial

<220>
<223> a primer (GYPF)

<400> 26
ggwtayaarg twtcwggtgg t   21

<210> 27
<211> 18
<212> DNA
<213> Artificial

<220>
<223> a primer (GYPR)

<400> 27
tcatgygtwc accttcat   18

<210> 28
<211> 23
<212> DNA
<213> Artificial

<220>
<223> a primer (GP1-F)

<220>
<221> misc_feature
<222> (7)..(7)
<223> n strands for any base

<220>
<221> misc_feature
<222> (11)..(11)
<223> n strands for any base

<220>
<221> misc_feature
<222> (12)..(12)
<223> n strands for any base

<220>
<221> misc_feature
<222> (14)..(14)
<223> n strands for any base
<220>
<221> misc_feature

```
<222>   (20)..(20)
<223>   n strands for any base

<400>   28
attatgntgc nngncaaatn caa                                          23


<210>   29
<211>   21
<212>   DNA
<213>   Artificial

<220>
<223>   a primer (GP1-R)

<400>   29
accaccwgaw acyttrtawc c                                            21


<210>   30
<211>   21
<212>   DNA
<213>   Artificial

<220>
<223>   a universal primer 16S rRNA gene

<400>   30
tggagagttt gatcctggct c                                            21
```